ABSTRACT

The present invention provides a two-piece apparatus for holding and aligning the MEMS deformable mirror. The two-piece apparatus comprises a holding plate for fixedly holding an adaptive optics element in an overall optical system and a base spatially fixed with respect to the optical system and adapted for mounting and containing the holding plate. The invention further relates to a means for configuring the holding plate through adjustments to each of a number of off-set pads touching each of three orthogonal plane surfaces on the base, wherein through the adjustments the orientation of the holding plate, and the adaptive optics element attached thereto, can be aligned with respect to the optical system with six degrees of freedom when aligning the plane surface of the optical element. The mounting system thus described also enables an operator to repeatedly remove and restore the adaptive element in the optical system without the need to realign the system once that element has been aligned.